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The Second Best Thing About Payday

# nih record

*'Weight of the Nation'*

## NIH Collaborates on HBO Obesity Project

By Amy F. Reiter

One-third of American adults are obese. Another third are overweight. How did this happen? And how can we, as a nation, return to a healthy weight?

To help illustrate the answers—and to show the science of obesity and NIH's efforts to combat the obesity epidemic—NIH has collaborated with HBO and major research and health organizations to develop *The Weight of the Nation*, a documentary series and public education initiative that spotlights this urgent public health problem.

"If we don't succeed in turning this epidemic around, we are going to face, for the first time in our history, a situation where our children are going to live shorter lives than we do," said NIH director Dr. Francis Collins, who appears in the full-length



SEE HBO PROJECT, PAGE 6 NIH director Dr. Francis Collins (r) films part of HBO series.

## Brain Science Is Changing Society, Says Legal Scholar Greely

By Susan Keown

Over the past several decades, neuroscience has created powerful technologies to peer into the brain and show us something astounding: the physical processes that create our minds. In a lecture on Mar. 13, law professor and bioethics expert Hank Greely asked scientists to



Stanford's Hank Greely speaks at NIH.

consider the profound impacts that neuroscience could have on criminal justice, family life, employment and other aspects of our society.

The "dual-use technologies" that have come out of neuroscience "will have implications far beyond health," says Greely, direc-

SEE GREELY, PAGE 4

## NIH Celebrates Women's History Month

By Audrey Hill

In a wide-ranging talk, four women leaders at NIH gave accounts of their career paths, attributing success to education, mentorship and family histories. Overcoming professional detours also helped them triumph in the formerly male-dominated health field.

On Mar. 29, NIH celebrated Women's History Month with a panel discussion on the theme "Women's Education—Women's Empowerment."

Dr. Yvonne Maddox, deputy director of NICHD; Dr. Susan Shurin, acting director of NHLBI; Dr. Belinda Seto, deputy director of NIBIB; and Dr. Janine Austin Clayton, acting



NCCAM director Dr. Josie Briggs offered remarks on behalf of the NIH director.

SEE WOMEN'S HISTORY, PAGE 8



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*NIH...Turning Discovery Into Health*

## briefs

### STEP Forum on Stem Cell Therapy

The staff training in extramural programs (STEP) committee will present a Science for All forum on the topic "Stem Cell Therapy: Hype and Reality," on Thursday, May 3, from 9 a.m. to noon in Lister Hill Auditorium, Bldg. 38A.

Will your doctor be able to order you a new heart off the shelf? Stem cells offer the promise of replacing damaged tissues and organs. Basic research, combined with advances in bioengineering, provides new insights into clinical interventions, disease modeling, drug screening and cell-based therapeutics. Come and learn about recent developments in different areas of stem cell research including clinical applications, regulatory policies and ethics.

### 5th Annual NIH Take a Hike Day, May 10

The 5th annual NIH Take a Hike Day will be held Thursday, May 10 from 11:30 a.m. to 2:30 p.m. All employees and contractors are invited to participate in this walk/fun run sponsored by the NIH Office of Management in partnership with the Office of Research Services' Division of Amenities and Transportation Services.

The course follows the perimeter of the NIH campus (approximately 2.8 miles) and the event will be held rain or shine. To register, visit [www.ors.od.nih.gov/pes/dats/wellnes/hike/Pages/hike.aspx](http://www.ors.od.nih.gov/pes/dats/wellnes/hike/Pages/hike.aspx).

You can help your institute/center earn bragging rights for having the most registered employees participating in this year's event. Winners will be determined based on the highest percentage of employees who register within their IC. The top six ICs will be recognized on the day of the event.

Race organizers will supply water stations along the course, but participants are invited to add decorations and staff to cheer your co-workers on. Bring your signs and pompoms and form your cheering section at one of the five perimeter water stations. Tables will be assigned on a first-come, first-served basis. If you would like to sponsor a water station, contact Pamela Jenkins at [jenkinsp@mail.nih.gov](mailto:jenkinsp@mail.nih.gov) or (301) 402-8180.

Individuals who need sign language interpreters and/or reasonable accommodation to participate should contact Jenkins. Requests should be made at least 5 days before the event.

### Second Protocol Navigation Lecture Set, May 7

The second lecture in the IRP Protocol Navigation Training Program Seminar Series will be held Monday, May 7 from 1 to 3 p.m. in Bldg. 50, Conf. Rm. 1227/1328. The program is a trans-NIH effort to develop resources and tools and to provide training for intramural staff involved in protocol development, writing, coordination and management. Dr. Sara Hull of the Clinical Center department of bioethics will present "Points to Consider in the Transition Toward Whole-Genome Sequencing in Human Subjects Research." For more information, contact Beverly Barham, (301) 594-2494, [bbarham@mail.nih.gov](mailto:bbarham@mail.nih.gov) or Marcia Vital, (301) 451-9437, [vitalm@mail.nih.gov](mailto:vitalm@mail.nih.gov).

### Bike to Work Day, May 18

Celebrate National Bike Month and Bike to Work Day with the NIH Bicycle Commuter Club, Friday, May 18, from 7 to 9:30 a.m. on the Paul Rogers Plaza in front of Bldg. 1. NIH will host two other pit stops, at Executive Blvd. and Rockledge. The Executive Blvd. stop runs from 8 to 9:30 a.m. and Rockledge runs from 6:30 to 9 a.m. At all NIH pit stops, employees and contractors who show up riding a bike and wearing a helmet may enjoy breakfast snacks and participate in a raffle including such prizes as cycling gear and Fitness Center memberships. Bike to Work Day takes place rain or shine. To register, visit [www.recgov.org/r&w/nihbike/](http://www.recgov.org/r&w/nihbike/). If you would like to volunteer at one of the stops, email Diane Bolton ([dbolton@nih.gov](mailto:dbolton@nih.gov)).

### National Day of Prayer, May 3

This year's observance of the National Day of Prayer will be held Thursday, May 3 from 11:30 a.m. to 1 p.m. on the lawn in front of Bldg. 1. Come out and join fellow NIH'ers, patients and friends to celebrate a day Congress has set aside for our country. All are welcome.

### NIH Hosts Asian Heritage Month Observance, May 16 in Lipsett Amphitheater

NIH's 2012 Asian American Pacific Islander Heritage Month observance will be held on Wednesday, May 16 from 10 to 11 a.m. in Lipsett Amphitheater, Bldg. 10. Themed "Striving for Excellence in Leadership, Diversity and Inclusion," the program features keynote speaker Dr. Kenneth M. Yamada, chief of NIDCR's Laboratory of Cell and Developmental Biology. The Office of Equal Opportunity and Diversity Management sponsors the observance. American Sign Language interpreters will be provided. For all other reasonable accommodation, call Tyrone Banks at (301) 451-9692 or the Federal Relay Service at 1-800-877-8339.

# nih record





Incoming NHLBI director Dr. Gary H. Gibbons (r) is welcomed by NHLBI acting director Dr. Susan Shurin and NIH director Dr. Francis Collins at a recent NIH lecture, where Gibbons gave a presentation on “Cardiovascular Health Disparities: Integrating Genomic and Social Determinants.”

## Gibbons Named Director of NHLBI

On Apr. 5, NIH director Dr. Francis Collins announced the selection of Dr. Gary H. Gibbons as new director of NHLBI. Gibbons is founder and current director of the Cardiovascular Research Institute, chairperson of the department of physiology and professor of physiology and medicine at Morehouse School of Medicine in Atlanta. He expects to start his new position in the summer.

Gibbons’ institute at Morehouse is recognized for its science related to the cardiovascular health of minority populations. His laboratory is focused on discovering novel mediators of vascular disease. His program involves collaborative efforts to study the functional significance of genomic variation and changes in gene activities due to epigenetic modifications of DNA that do not involve a change in the genetic code as factors that enhance susceptibility to cardiovascular disease.

Dr. Susan Shurin will continue as NHLBI acting director until Gibbons arrives, at which point she will resume her role as deputy director. “I want to extend my deep gratitude to Susan for her strong leadership in this role,” said Collins.

Gibbons will oversee NIH’s third largest institute, with an annual budget of more than \$3 billion and a staff of 917 employees. He will also direct his own NIH lab, focusing on predictive health and genomic medicine in minority populations.

“It’s an honor to join NIH and lead NHLBI,” said Gibbons. “The globally recognized research and training supported by NHLBI continues to advance biomedical knowledge in fields related to heart, lung and blood diseases. I look forward to working with the institute staff and

with the many researchers supported by the institute to foster multidisciplinary approaches to improve disease prevention, diagnosis and treatment that will advance the health of all Americans.”

Gibbons has served as a member of the National Heart, Lung, and Blood Advisory Council since 2009, a position he resigned after being selected as director of NHLBI. He was also a member of the NHLBI board of extramural experts. He has received 15 NHLBI-supported grants since 1997.

Originally from Philadelphia, Gibbons earned his undergraduate degree from Princeton and graduated *magna cum laude* from Harvard Medical School. He completed his residency and cardiology fellowship at Brigham and Women’s Hospital in Boston. Prior to joining Morehouse in 1999, he was a member of the faculty at Stanford University from 1990 until 1996, and Harvard Medical School from 1996 until 1999.

Gibbons has received numerous honors, including election to the Institute of Medicine of the National Academies of Sciences; selection as a Robert Wood Johnson Foundation Minority Faculty Development Fellowship awardee; selection as a Pew Biomedical Scholar by the Pew Charitable Trusts; and recognition as an established investigator of the American Heart Association. 📖

## Soloway Awardee Kenny To Lecture, May 10

Dr. Paul John Kenny, associate professor in the department of molecular therapeutics at the Scripps Research Institute, Jupiter, Fla., has received the 2012 Mathilde Soloway Lecture Award in the Neurosciences for his research on the neurobiology of drug addiction. The annual award, administered by the Foundation for Advanced Education in the Sciences, honors rising neuroscientists for innovative research having significant translational potential. Kenny will deliver a lecture titled, “Non-coding RNAs and Drug Addiction.”



Kenny leads a research group focused on understanding the neurobiological mechanisms of drug addiction, obesity and schizophrenia, with an emphasis on the role of nicotinic acetylcholine receptors in these processes. The group uses genetics, viral-mediated gene transfer and protein and RNA biology combined with complex behavioral phenotyping in mice to better understand the mechanisms of drug addiction. The group also investigates brain reward pathways in obesity and is working to develop novel small molecule therapeutics for addiction.

Kenny received his bachelor’s degree in biochemistry from Trinity College Dublin in 1996 and his Ph.D. in neuropharmacology at King’s College London in 2000. His studies focused on understanding the role of nicotinic receptors in regulating anxiety-like behaviors in rodents. This work piqued his interest in the neurobiology of nicotine addiction in tobacco smokers and the broader role for nicotinic receptors in addiction and other psychiatric illnesses.

He completed his postdoctoral training at the Scripps Research Institute in La Jolla, Calif., in the laboratory of Dr. Athina Markou, where he worked on understanding the role of glutamate transmission in nicotine dependence. In collaboration with George Koob at Scripps, he investigated the neurobiology of compulsive-like cocaine intake in rats with extended access to the drug. He established his own laboratory at Scripps in Florida in 2006. He has published in *Nature*, *Nature Neuroscience* and *Nature Medicine* and has received several young investigator awards.

## GREELY

CONTINUED FROM PAGE 1

### Right:

*Said Greely, "I'm an academic; we tend to think that information is good and more information is better, but in the real world, it doesn't always work that way."*

PHOTOS: ERNIE BRANSON

tor of Stanford University's Center for Law and the Biosciences and director of the Stanford interdisciplinary group on neuroscience and society. "Because what we care about in people is not fundamentally their bodies, it is their minds, it is their behavior, it is who they are."

In the lecture, part of the NIMH Director's Innovation Speaker Series, Greely asked neuroscientists to consider their own responsibility to help society navigate the novel ethical questions arising from the wider application of neuroscience.

"Neurohype is everywhere," he said. "Do what you can to be a cautionary influence." A technology that works well for one purpose in the lab or hospital might not work well for a different purpose, he warned.

This common-sense caveat often goes unheeded, said Greely, describing commercial firms that are selling functional magnetic resonance imaging (fMRI) for use as a "lie detector." In hospitals, fMRI is used to monitor brain tumors and assess the effects of stroke. Research on its ability to detect lies, however, is limited and inconsistent. Furthermore, there is no research—and likely never will be any—on fMRI lie detection in a stressful criminal justice setting instead of in a laboratory.

Even if there is good evidence, Greely emphasized, the social applications of neuroscience advances should be approached with caution. He gave the example of a new brain-imaging radioligand, which the FDA is expected to approve soon. Positron emission tomography imaging using this compound shows the build-up of the plaque found in the brains of people who died of Alzheimer's disease. Combined with biomarker and behavioral tests, this method can probably be used to identify people in late-middle age who have little plaque and thus probably will not be diagnosed with Alzheimer's within the next 10 years.

Not everyone will want to take this test, Greely observed.

"I'm an academic; we tend to think that information is good and more information is better, but in the real world, it doesn't always work that way," he said. In addition to the personal and family stresses this kind of knowledge could create, there are potentially serious legal implications. For example, the law currently does not protect anyone against discrimination by employers or health insurance based on results from this kind of test.

It is difficult to know what the future will bring,



Greely conceded, but he cautioned that we still should be prepared. He told his audience, "Some of the things I've told you about I'm sure will not happen, but I'm just not sure which. Other important social consequences will happen that I haven't told you about because no one has thought of them yet."

There are several ways that neuroscientists could help to steer society's adoption of neuroscience's dual-use technologies. Writing newspaper editorials and letters to members of Congress, giving interviews to journalists and even speaking up in casual conversations with friends can make a difference, he said.

"Take action to do what you can," he exhorted. "I'm not saying you have to be a crusader, but be engaged." 🗣️

### 'Medicine for the Public' Lectures Set

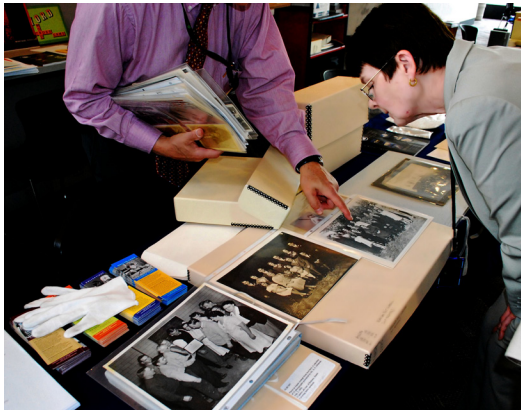
Discover the latest in research and treatment for diabetes and Alzheimer's disease with lectures by experts from the Clinical Center, Johns Hopkins Medicine and Suburban Hospital.

Tuesday, May 15—Outsmart Diabetes: A Framework for Prevention and Management

Tuesday, May 22—Is It Memory Loss or Alzheimer's Disease? Learn the Facts.

Both talks will be held from 7 to 8:30 p.m. at Suburban Hospital Auditorium, 8600 Old Georgetown Rd., Bethesda. Register by calling (301) 896-3939. Lectures are free and open to the public. Light refreshments are available at 6:30 p.m. For more information, visit [www.cc.nih.gov/about/news/mfp.shtml](http://www.cc.nih.gov/about/news/mfp.shtml).





NLM staff member Margaret Byrnes (r) at a 2011 Preservation Week event

PHOTO: E. DÉSHAUN W. WILLIAMS

### Special Programs Announced for Third Annual NLM Preservation Week

As part of the national celebration of Preservation Week, sponsored by the American Library Association, NLM will host a 1-day event Tuesday, May 1. From 10:30 to 11:30 a.m., you can attend a panel discussion by NLM staff on how to ensure the future of your personal digital collections of photos, documents and videos. It will take place in the NLM Visitor Center, first floor, Bldg. 38A.

Then, from 11:30 a.m. to 2 p.m. in the B1 level lobby of Bldg. 38A (outside NLM cafeteria), NLM staff will hold demonstrations on downloading photos, scanning photos and documents and ensuring that your personal digital files will be accessible for future use. The exhibit booths will also provide information on preserving your digital and paper-based collections. All are welcome. For more information, visit [www.nlm.nih.gov/psd/preservationweek/presweek2012.html](http://www.nlm.nih.gov/psd/preservationweek/presweek2012.html).

Also of interest, Simon Chaplin, director of the Wellcome Library, London, England, will present a lecture, "Digitizing the Foundations of Modern Genetics: Challenges and Opportunities," May 1, 2-3 p.m., Lister Hill Auditorium, Bldg. 38A. The session will summarize progress to date and lessons learned for future phases of the Wellcome Library's plan to improve physical and online access to its collections.

### Recycling Efforts Pay Dividends for Local Nonprofit

Have you noticed the special recycling bins in various sites within the Clinical Center, National Library of Medicine and Children's Inn, laden not with paper or plastic but with metal can pull tabs? These represent an idea cherished by Jodyann Faber, a local resident and NIH patient who fought but succumbed to breast cancer in 2004.

Her brainchild, Pull Tabs for Charity, is a Bethesda-based, nonprofit project adopted by her mother Rovi Faber, with the goal of helping raise children's awareness of the value of giving to others. PTFC support comes from 47 states, as well as from Armed Forces members stationed worldwide.

Funds are obtained by selling the aluminum tabs to scrap operations, including Montgomery Scrap Co. in Rockville. Tabs from soda and other drink cans weigh little; it takes about 1,500 to equal a pound, or 98 cents worth of aluminum. As a result of having collected hundreds of thousands of tabs from cans, PTFC was recently able to give \$5,000 to NIH Charities.

PTFC supporters include children and parents nationwide. An elementary school student in Texas hauled in 104 pounds of the product last year. Ashburton Elementary School in Bethesda has collected more than 150 pounds of aluminum annually since 2009.

NIH'ers are also taking part. Perhaps the most loyal supporter is Chau Hoang, a pharmacist at the Clinical Center. "I had been searching for non-profit, local organizations that I could get involved with and came across PTFC last November," she said. "I found that collecting tabs is an effortless charity work that everyone, anytime, everywhere can get involved with."

Also concerned about the environment, she added, "I strongly believe that we should leave no trace, or the least impact, on our environment and that we should teach our children to do the right thing." Hoang has secured the support of coworkers in the pharmacy and other places around NIH.

Randy Schools, president of the NIH R&W Association, and area police and fire departments have also jumped on the bandwagon. Meanwhile, tab stations outside of NIH are swarming with donated tabs. As word spreads, the fever to collect aluminum for charity has been contagious.

"I never thought our grassroots efforts would be embraced by so many children, parents and teachers—it's been almost like magic," said PTFC executive director Rovi Faber. "We're just tickled to know that we're on our way to making the collection of pull tabs a fun household, school and work ritual. Most of all, it's heartwarming to see children so eager to experience the joy of giving to others—just like my Jodyann did."

NIH'ers can also donate aluminum tabs at the R&W gift shop in Bldg. 31, Rm. B1W30.—Jan Ehrman



Demonstrating how easy it is to support Pull Tabs for Charity are (from l) Chau Hoang, Belinda Weiss, Sila Toch, Christine Yoon, Brian L'Heureux and Sophia Lopez.



## HBO PROJECT

CONTINUED FROM PAGE 1

### Above:

Collins is a recurring spokesman in the HBO series, appearing in all televised segments.

### You're Invited to Advance Screening, May 8

The NIH community is invited to an advance screening of a film of the HBO documentary series *The Weight of the Nation*. It will be held Tuesday, May 8, 2:30-4 p.m. in Masur Auditorium, Bldg. 10. There will be introductions by NIH director Dr. Francis Collins and HBO producer John Hoffman. A panel discussion with Hoffman and NIH obesity experts follows the screening. For more information, contact Maggie McGuire at (301) 594-5789 or [mcguirema@cc.nih.gov](mailto:mcguirema@cc.nih.gov).

films. "It takes diverse and rigorous research to understand the causes of obesity and to identify interventions that work in the real world. The results from federally funded research, as seen in these films, can help to prevent and treat obesity and its complications."

The project consists of four documentary films to air on HBO on May 14 and 15; a 3-part series for families, with the first part airing May 16 on HBO Family; 12 short films, including one on NIH; and a nationwide community-based outreach campaign. Films will be available free on HBO.com and through some television carriers. Segments of the series will also be screened at events around the country, including one at NIH on May 8 (see sidebar).

An HBO crew spent 2 days on the NIH campus, documenting how researchers are trying to understand, prevent and treat obesity. HBO producer John Hoffman talked with Collins about NIH's efforts to learn about and combat obesity and talked with NIDA director Dr. Nora Volkow about obesity and how behaviors may be regulated by reward pathways in the brain.

"When it comes to America's health, there are problems which must be confronted, even if they make us uncomfortable, frighten us or are so daunting we don't know where to begin," said Hoffman, who previously worked with NIH on *The Addiction Project* and *The Alzheimer's Project*, collaborating with NIDA and NIAAA on the former and NIA on the latter. "With *The Weight of the Nation*, HBO is again proud to stand together with the NIH, as we step forward to...hopefully reverse the obesity epidemic."

HBO also filmed several NIH grantees, as well as people struggling with obesity, representatives from local governments, health care providers and many others.

Leaders of the NIH obesity research task force from NIDDK, NHLBI, NICHD and NCI provided scientific guidance for *The Weight of the Nation* films and screening kits, which will be available to up to 40,000 health centers and community groups. These groups, and others who sign up on the HBO.com web page, will get copies of the films and guidance on how to use elements from the project to assist in their organizations' weight-control efforts.

HBO also developed a short film on NIH, visiting the Clinical Center. The crew followed Dr. Kevin Hall of NIDDK and Dr. W. Kyle Simmons of NIMH and the Laureate Institute for Brain Research. Available on HBO.com, the film follows their study of the effects of reduced fats versus reduced carbohydrates on both metabolism and the brain's reward pathways.

The crew also followed a participant in Hall and Simmons' study, Ed Norris of Washington, D.C., as he spent time in the Clinical Center's metabolic clinical research unit. Though Norris is no fan of the blood draws or the isolation of the metabolic chamber—where he spent several 24-hour sessions—he found reward in what he was learning about his own body.

"Finding out about myself, what makes my body go and how I can lose weight and remain at a sustainable weight was really interesting," he said.

Norris joined the study partly because he'd seen family members and friends suffer from heart disease, diabetes and cancer and wanted to do what he could to extend his own life, for himself and his family.

Norris hopes he helps people by participating in the HBO series. "We have our stigmas, especially African-Americans—a lot of us are afraid to go to the doctor," he said. "Hopefully, I can convince some people to come and learn more about themselves and how to be healthier. There are a lot of things that might be preventable. I want people to take some steps." 🍌





Assisting embassies abroad are NIH'ers (above, from l) Dr. Ben Prickril, Dr. Lana Shekim and, at right, Andrew Ryscavage.

PHOTOS: MIKE MILLER

## Scientists Share Expertise Overseas

By Ann Puderbaugh

Whether working to improve disease diagnostics in Vietnam, enhance lab safety in Sierra Leone or encourage U.S. research collaborations with Morocco, a number of NIH scientists have been sharing their expertise with other countries through the Embassy Science Fellowship Program (ESFP).

Through the initiative, about 300 U.S. government scientists have been placed at embassies and consulates around the world for assignments lasting from 1 to 3 months, with 13 fellows coming from NIH. The effort is intended to facilitate and encourage bilateral cooperation and research on science and technology issues. It's also a mechanism to advance U.S. research and development priorities, as well as foster relationships that benefit domestic technical agencies.

"This program provides incredible opportunities for NIH scientists to gain first-hand knowledge of global health issues," said FIC director Dr. Roger Glass. "This is a wonderful way for us to share our wealth of knowledge with other countries, while building new relationships and networks that will speed research progress."

Three NIH scientists are currently participating in the program. NCI international program officer Dr. Ben Prickril was posted to Ankara, Turkey to share information about issues related to cancer, biotechnology, human health and agriculture. His fellowship is intended to help stimulate discussion on cancer prevention topics related to agriculture.

Amman, Jordan is the destination for Dr. Lana Shekim, director of NIDCD's voice and speech program. She is helping assess the country's services for people with communication disorders and exploring opportunities for research collaborations between the U.S. and Jordan, as well as throughout the Middle East and North Africa region. According to the World Health Organiza-



tion, roughly 1 billion people in the world—or 15 percent of Earth's inhabitants—live with a disability. Disorders of communication, such as hearing loss and voice, speech and language disorders, represent a large portion of that number, with hearing loss alone affecting roughly 278 million people worldwide. Shekim, a fluent Arabic speaker, works with academicians, clinicians, health advocates and other non-governmental organizations to identify resources and programs that could help Jordan plan to strengthen its services for people with communication disorders.

Finally, Andrew Ryscavage, a technical laboratory manager at NCI's Center for Cancer Research, will travel to Lisbon, Portugal to help leverage the country's emerging talent in biotechnology. He will provide advice and training in the areas of bioprocesses, cell and tissue engineering and biomedical devices. The Portuguese biotechnology sector has experienced rapid growth over the past few years. A significant number of these companies are in the forefront of innovation and development and they support agricultural, environmental and gene-based bio-industries. However, the need for resources to sustain these companies after start-up is high and of critical importance to the health and welfare of the Portuguese people.


Past NIH fellows include Dr. Louise Rosenbaum of NIAMS, who was assigned to the U.S. Embassy in Rabat, Morocco in 2010. She says the program was eye-opening and offers a great opportunity to share expertise with other government officials and conduct a brief, high-impact project. "It's also incredibly fun and satisfying, and expands the fellow's and the NIH's perspectives in positive and unexpected directions," she observed.

Meanwhile, Dr. Jonathan Kagan of NIAID worked with the health team at the U.S. Embassy in Hanoi in 2010 to assess clinical research capacity in Vietnam. Because Southeast Asia is the origin of many emerging and re-emerging infectious diseases, an urgent need exists for clinical research to support the development of improved diagnostics, therapeutics and vaccines to detect, treat and prevent the spread of these microbial threats. Kagan's project developed a reusable framework for evaluating clinical research capacity in-country and made practical recommendations for how such capacity can be enhanced to better address health issues in Vietnam and the region.

"The ESF Program is best suited to NIH staff with considerable management and policy experience beyond their scientific subject matter expertise," said Kagan. He also suggested candidates possess "substantial experience working on research projects outside the U.S., including a sensitivity to other cultural norms and an openness to seeing and doing things differently."

Dr. Christopher Taylor, also of NIAID, traveled to Freetown in Sierra Leone for his embassy fellowship in 2009, where he focused on addressing malnutrition, infectious disease and the lack of trained health care providers. He organized a scientific meeting to encourage the country's investigators to strengthen scientific rigor, improve patient safety and enhance research capacity. It's since grown into an annual symposium that includes sessions on grant-writing and laboratory safety. "As a result, there is now increased awareness of the impact of research and evidence-based approaches to health issues in Sierra Leone," he said.

FIC has coordinated participation of NIH embassy fellows since 2005. The State Department's Office of Science and Technology Cooperation manages the shared-cost program, whereby U.S. agencies supply personnel, travel costs and training expenses and the U.S. mission provides housing, office space, administrative support and in-country travel.

Applicants are matched with countries based on their areas of expertise and needs identified by the embassies. For more information, contact Tina Chung at [tina.chung@nih.gov](mailto:tina.chung@nih.gov). 



## WOMEN'S HISTORY

CONTINUED FROM PAGE 1

### **Above, l:**

Panelists included (from l) Dr. Yvonne Maddox, Dr. Susan Shurin, Dr. Belinda Seto and Dr. Janine Austin Clayton.

### **Above, r:**

CSR deputy director Dr. Cheryl Kitt served as moderator for the session.

### **Below:**

Seto said her mother instilled in her a love of learning.

PHOTOS: ERNIE BRANSON

director of ORWH, comprised the panel.

Opening the discussion, moderator Dr. Cheryl Kitt, deputy director of CSR, read a letter from Sen. Barbara Mikulski (D-MD), the longest-serving woman senator. She lauded the historic establishment of the Office of Research on Women's Health at NIH, which facilitated the inclusion of women in federally funded research protocols and groundbreaking studies on breast cancer.

Dr. Josie Briggs, director of NCCAM, gave remarks on behalf of herself and NIH director Dr. Francis Collins. "We've seen incredible changes in women's careers since I graduated from medical school. The glass is at least half full! The leadership of academic medicine is more balanced; our leadership here is incredibly gender-mixed." Yet, women's representation in U.S. politics lags. She closed with an African proverb Collins selected: "Educate a boy and you educate an individual; educate a girl and you educate a community."

Maddox, who grew up in a small Virginia community, began by noting that all of her high school science teachers were men. "I wanted to have...the power they had in the classroom." She continued, "It was more than just the power associated with the knowledge, but that the knowledge allowed you to help people."

When her father died unexpectedly, she shifted her career plans by foregoing medical school and instead working as a blood bank technician. Eventually she entered a Ph.D. program at Georgetown University, where a mentor told her, "You need to recognize early on that you're going to have to fight and maybe [fight] a little bit harder than the guys." She now oversees research programs ranging from developmental biology to population issues at NICHD.

Shurin cited her grandfather as an early influence. "When I was about 6, my grandfather started taking me on house calls. His motivation for doing this was to make sure I was exposed to rubella," she said. She caught something else on those house calls—a love of medicine.

In high school, she worked in medical laboratories, following in several family members' footsteps. "At the same time I was developing this huge passion in science, I was also absorbing lessons from women in my family," she said.

Shurin, whose first child was born while she was in medical school, had observed that, in general, "Women either had a career or a family, but didn't have both." Her grandfather, who improved minority health care access in his community, taught her that it is more effective to make change from a leadership position than from outside the system. She now is responsible for a \$3 billion institute.

"My mother always struck me as a woman in pursuit of knowledge," said Seto, who was born







*ORWH's Clayton said her upbringing led her to believe that there was nothing she could not do for a professional career.*

in China. Her mother's formal education was thwarted by the Second Sino-Japanese War, yet she educated herself informally and ensured her daughter's education by immigrating to the United States.

Seto went on to earn a Ph.D. from Purdue University. "When I went to grad school, engineering [programs] meant men. I realized that as tough as it was, I could compete academically with the men; I could swim with sharks."

A mentor also played a pivotal role in Seto's early career. By allowing Seto to serve as sole author on scientific papers and setting high English standards, she taught Seto to be generous and rigorous. Seto is now chair of the NIH working group on women and bioengineering, in addition to her leadership role at NIBIB.

Clayton came from a family in medicine and went to an all-girls Catholic high school. "I never thought you couldn't do anything as a woman, perhaps because of encouragement from the nuns, other teachers and family." However, when she became pregnant in medical school, she had to postpone her education and enroll in a different program.

"When I did start [again], I was so motivated," she said. Alternating breastfeeding and reading textbooks, she took guidance from her Howard University mentor's favorite quote: "Equanimity under duress." Today, Clayton uses her multitasking skills as acting director of ORWH. 📌



*Richard Trott (l) chief, Transportation Management Branch, Division of Logistics Services, OD, views driver's online training with Mark Minnick, fleet manager at NIH.*

## Take Training Before Operating Government Vehicle

Did you know that a government vehicle should only be used if no other means of economical transportation is available? Did you know that the use of hand-held devices was prohibited while operating a government vehicle before most states made it against the law? Do you know what kind of maintenance you are authorized to pay for when using a DHHS fleet card?

From Jan. 1, 2000, to date, there have been 50 reportable government vehicle-related accidents here at NIH, with a total cost to NIH of \$121,952.78 to repair damages. This is an average of 4.5 accidents per year, costing an average of \$11,086.62 per incident. There has also been one injury associated with these accidents. In many instances, the accidents have been due to operator error.

In an effort to reduce the number of vehicle-related accidents and injuries, DHHS and NIH have teamed up to create an online course of study that is free to NIH employees. Knowing a few simple rules about the use of government vehicles and fleet cards can be valuable when operating a government-owned vehicle. In 30 minutes or less, you can complete the NIH Fleet Drivers' Overview and Training course. Topics include: responsible use of fleet vehicles; responsible use of the fleet card; top 10 rules to remember; and requirements for maintaining your driver's license.

You can find the course at the HHS Learning Portal (<https://lms.learning.hhs.gov/>). For assistance logging in, contact the help desk at 1-866-246-5440 or [DHHSHelp@gpworldwide.com](mailto:DHHSHelp@gpworldwide.com) or call (301) 496-4511.

## Shape Your Future at Career Symposium

The NIH Office of Intramural Training & Education invites all NIH graduate students and postdoctoral trainees, both basic scientists and clinicians, to participate in the NIH Career Symposium on Tuesday, May 18 at Natcher Conference Center and Lister Hill Auditorium from 8:30 a.m. to 5 p.m. The symposium provides an opportunity for fellows and graduate students to learn about scientific career options and to explore factors that lead to career success. Panel sessions cover academic, government, industry and non-profit career paths. More than 80 speakers will provide insights into their careers: what their current job entails, its pluses and minuses and how they got there. To register, visit [www.training.nih.gov](http://www.training.nih.gov). This event is organized by OITE, the fellows committee and the Graduate Student Council.

and later became infected with HIV and 205 vaccinated participants who remained uninfected.

### Spontaneous Gene Glitches Linked to Autism Risk with Older Dads

Researchers have turned up a new clue to the workings of a possible environmental factor in autism spectrum disorders (ASDs): fathers were four times more likely than mothers to transmit tiny, spontaneous mutations to their children with the disorders. Moreover, the number of such transmitted genetic glitches increased with paternal age. The discovery may help to explain earlier evidence linking autism risk to older fathers.

The results, reported online Apr. 4 in *Nature*, are among several from a trio of new studies, supported in part by NIH, finding that such sequence changes in parts of genes that code for proteins play a significant role in ASDs. One of the studies determined that having such glitches boosts a child's risk of developing autism 5- to 20-fold.

Taken together, the three studies represent the largest effort of its kind, drawing upon samples from 549 families to maximize statistical power. They reveal sporadic mutations widely distributed across the genome, sometimes conferring risk and sometimes not. While the changes identified don't account for most cases of illness, they are providing clues to the biology of what are likely multiple syndromes along the autism spectrum.

### New Classification Criteria Released for Research on Sjogren's Syndrome

An international team of researchers released new classification criteria for the common autoimmune condition Sjogren's syndrome. Classification criteria are the consensus opinion of a group of experts that researchers use in clinical studies to confirm a previous diagnosis and/or subclassify patients who have the same type of a given condition. The new guidelines appear in the April issue of *Arthritis Care & Research*.

The criteria are the first for Sjogren's syndrome to be based solely on objective clinical tests. Other criteria historically have permitted various testing subjectivity to enable the classification of this notoriously complex syndrome that affects multiple parts of the body, typically the eyes, salivary glands and joints.

The new criteria come from the Sjogren's International Collaborative Clinical Alliance. NIDCR, with support from NEI and the Office of Research on Women's Health, supported the work.—compiled by Carla Garnett

### Bilinguals Better at Multitasking

Children who grow up learning to speak two languages are better at switching between tasks than are children who learn to speak only one language, according to a study funded in part by NIH. However, the study also found that bilinguals are slower to acquire vocabulary than are monolinguals, because bilinguals must divide their time between two languages while monolinguals focus on only one. NICHD provided funding for the study, which was published online in *Child Development*.

In the study, bilingual and monolingual children were asked to press a computer key as they viewed a series of images—either of animals or of depictions of colors. When the responses were limited to either of the two categories, the children responded at the same speed. But when the children were asked to switch, from animals to a color and press a different button for the new category, bilinguals were faster at making the change than were the monolinguals.

Researchers often use this switching task to gauge a set of mental processes known as executive functioning—generally defined as the ability to pay attention, plan, organize and strategize.

### Possible Clues Found to Why HIV Vaccine Showed Modest Protection

Insights into how the first vaccine ever reported to modestly prevent HIV infection in people might have worked were published Apr. 4 online in the *New England Journal of Medicine*. Scientists have found that among adults who received the experimental HIV vaccine during the landmark RV144 clinical trial, those who produced relatively high levels of a specific antibody after vaccination were less likely to get infected with the virus than those who did not. NIAID co-funded the research.

In the trial, which involved more than 16,000 adult volunteers in Thailand, the group that received the vaccine had a 31 percent lower chance of becoming infected with HIV than the group that received a placebo. Ever since the study results were reported in 2009, a consortium of more than 100 scientists from 25 institutions has been searching for molecular clues to explain why the vaccine showed a modest protective effect.

The new report describes the researchers' analyses of blood samples taken from a representative subset of study participants: 41 who were vaccinated



*Children who grow up learning to speak two languages are better at switching between tasks than are children who learn to speak only one language, according to a study funded in part by NIH.*



# milestones

## Former NICHD Scientific Director Lowe Is Mourned

Dr. Charles U. Lowe, a former associate director of special projects at the National Institute of Child Health and Human Development, died on Feb. 9 at age 90.



A distinguished research scientist, pediatrician and administrator, Lowe joined NICHD in 1968 as scientific director. There he led the institute's intramural research effort, focusing on nutrition and developmental disorders. During his tenure, Lowe initiated and conducted a multi-site study of mid-trimester amniocentesis, a procedure that had just been introduced for the prenatal diagnosis of certain genetic disorders.

In 1974, Lowe joined the staff of the assistant secretary for health as a special assistant for child health affairs. He served as executive director for two key initiatives passed by Congress: the President's Biomedical Research Panel and the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. The national commission's recommendations for human subject protection were implemented as federal requirements and continue today with little change.

Lowe returned to NICHD in 1983 as a special assistant to the director. In 1987, he became the institute's associate director for special projects, where he oversaw a number of critical research activities. He played a leading role in the clinical trials that tested vaccines later approved for the prevention of pertussis and typhoid fever.

Lowe was born in Pelham, N.Y., in 1921 and graduated from Harvard University in 1942. He received his M.D. degree from Yale School of Medicine in 1945 and completed his internship in pediatrics at Children's Hospital Boston and his residency at Massachusetts General Hospital. While serving as chief resident in pediatrics, Lowe provided the first description of a rare metabolic disorder that causes intellectual disability, kidney dysfunction, cataracts and glaucoma. The disorder was named for him, and is known as Lowe syndrome or oculo-cerebro-renal syndrome of Lowe.

Before joining NICHD, Lowe held academic and research positions at the University of Minnesota, the University of Buffalo and the University of Florida. He was the founder of *Pediatric Research*, the journal of the Society for Pediatric Research, and served as its editor for 12 years.

In addition to his scientific contributions, Lowe is remembered for his efforts in establishing an onsite day care center at NIH in 1973. The center, one of the first in the federal government at the time, served as a model for many others and is still in operation today.

After his retirement from NICHD in 1994, Lowe returned to Cambridge, Mass., where he endowed the Charles and Eileen Lowe Career Decision Fund at Harvard, served as historian and archivist for Lowell House, an undergraduate residence at Harvard, and pursued his personal passions as a cellist, gardener, master woodworker and art collector.

## Mercado, Former NIAID Researcher, Dies

Dr. Teresa Isabel Mercado died peacefully in her sleep on Mar. 11 at age 90. She was an established researcher in NIAID's Laboratory of Parasitic Diseases for about 30 years beginning in the 1950s. She spent most of her career studying Chagas disease, a potentially life-threatening illness spread by insects that is found mainly in Latin America. Originally from Ponce, Puerto Rico, Mercado earned her doctorate in 1947 from Catholic University. Memorial contributions may be made in Mercado's name to the Msgr. Quinn Education Fund, Our Lady of Lourdes School, 7500 Pearl St., Bethesda, MD 20814. ☛



*In a photo from the 1960s, Dr. Teresa Mercado (r) talks with colleagues.*

## Women's Health Studies Seek Healthy Volunteers

Healthy women ages 18-50 are invited to participate in outpatient research studies. Compensation is provided. Call (301) 496-9576 and refer to protocols 81-M-0126, 88-M-0131 and 03-M-0138.

## Postpartum Depression Research Studies

Women ages 18-45 who struggle with postpartum depression or who had PPD in the past are invited to participate in outpatient research studies. There is no cost for participation. Compensation may be provided. Call (301) 496-9576 (TTY 1-866-411-1010) and refer to study 03-M-0138.

## Overweight Volunteers Needed

NICHD is looking for men and women ages 35-70 who are overweight and have abnormal glucose levels. After an initial screening visit for general health assessment, participants will undergo treatment with a cortisol-blocking medication (mifepristone) or a non-active pill (placebo) for 7 days. Each participant will take both study agents with a gap of 6 to 8 weeks between the two. Testing before and after treatment with the study medications will include blood drawing over 24 hours, urine collection, an oral and an intravenous glucose tolerance test, and 1- to 2-day overnight inpatient stay. Compensation will be provided. For more information, call 1-800-411-1222 (TTY 1-866-411-1010) and refer to study 11-CH-0208.

### Burkle To Give Leiter Lecture, May 9

Dr. Frederick M. “Skip” Burkle will give the 2012 Joseph Leiter NLM/Medical Library Association Lecture, Wednesday, May 9. It will take place at 2 p.m. in Lister Hill Auditorium, Bldg. 38A. He will speak about “Future Humanitarian Crises: Challenges to Practice, Policy & Public Health.”



Burkle is senior fellow and scientist, Harvard Humanitarian Initiative, Harvard School of Public Health, and former senior scholar and now senior associate faculty and research scientist, Center for Refugee & Disaster Response, Johns Hopkins University Medical Institutes. He also serves as a senior international public policy scholar, Woodrow Wilson Center for International Scholars, Washington, D.C. (2008-present).

In addition, he serves as adjunct professor and as a clinical professor of surgery and adjunct professor in tropical medicine at the University of Hawaii. He is also adjunct professor, department of military & emergency medicine, Uniformed Services University of Health Sciences and the department of public health and tropical medicine, John Cook University, Australia.

### Neuroscientist Farah To Speak, May 2

Dr. Martha J. Farah, Annenberg professor of natural sciences and director of the Center for Neuroscience and Society at the University of Pennsylvania, will present the second of three annual NIH Director’s Lectures on Wednesday, May 2 from 3 to 4 p.m. in Masur Auditorium, Bldg. 10. Her talk is titled “Twenty-first Century Neuroscience: From Lab and Clinic to Home, School and Office.”



Farah, a cognitive neuroscientist, has devoted much of her career to understanding the mechanisms of vision, memory and executive function in the human brain. In recent years, she has shifted her research focus to a set of issues that lie at the interface between cognitive neuroscience and “the real world.” These new issues include the effects of socioeconomic adversity on children’s brain development as well as emerging social and ethical issues in neuroscience, termed “neuroethics.” She is also involved in investigations of neurogenetics, mood regulation and decision-making.

### Sun-Powered Waste Compactors Piloted at NIH

On Apr. 16, NIH unveiled a pilot network of four solar-powered waste stations on the Bethesda campus. The BigBelly solar waste stations will be located in areas generating high volumes of trash: South Dr./Rockville Pike entrance near the Gateway Center, outside of the Bldg. 10 B1 cafeteria, at the Bldg. 31 patio and behind Bldg. 45.



Combining solar-powered remote monitoring and on-site compaction, the BigBelly solar system uses data and increased capacity—5 times the amount of a typical waste container—to reduce the need for collection trips by about 80 percent, conserving fuel, reducing emissions and freeing staff for other tasks.

The waste stations will replace many of the wire mesh containers that often tip over, reducing litter and ensuring a cleaner environment. Since the stations are enclosed, they will also reduce pest issues and related public health concerns. The BigBelly system’s web-based management console gives staff real-time insight and historical reporting into the status of every waste station.

NIH currently collects trash 10 times each week from 47 trash cans around the grounds, but expects to collect BigBelly deposits only twice a week. Future expansion of the solar-compactor network following initial deployment will be evaluated based on the pilot’s success. For more information, contact Don Wilson at the Division of Environmental Protection, (301) 496-7990.



At left, photo contest winners (from l) Drs. Daniel Appella, Amlanjyoti Dhar and Dale Lewis; at right, first place photo, taken by Appella



Second place—submitted by Lewis (subject); photo by Dhar

### Three Honored in ORS Photo Contest

The Division of Occupational Health and Safety, ORS, recently honored winners in its “In Focus! Safe Workplaces for All” photo contest. The contest challenged entrants to highlight workplace safety in an entertaining way. Winning first place was Dr. Daniel Appella, senior investigator in the Laboratory of Bioorganic Chemistry, NIDDK. Second place went to Dr. Dale Lewis, staff scientist, and Dr. Amlanjyoti Dhar, postdoctoral fellow, both from the Laboratory of Molecular Biology, NCI. The winning images depict workers in laboratory workplace settings wearing proper personal protective equipment. The photos will appear in safety posters and newsletters and will be featured on the DOHS web site.